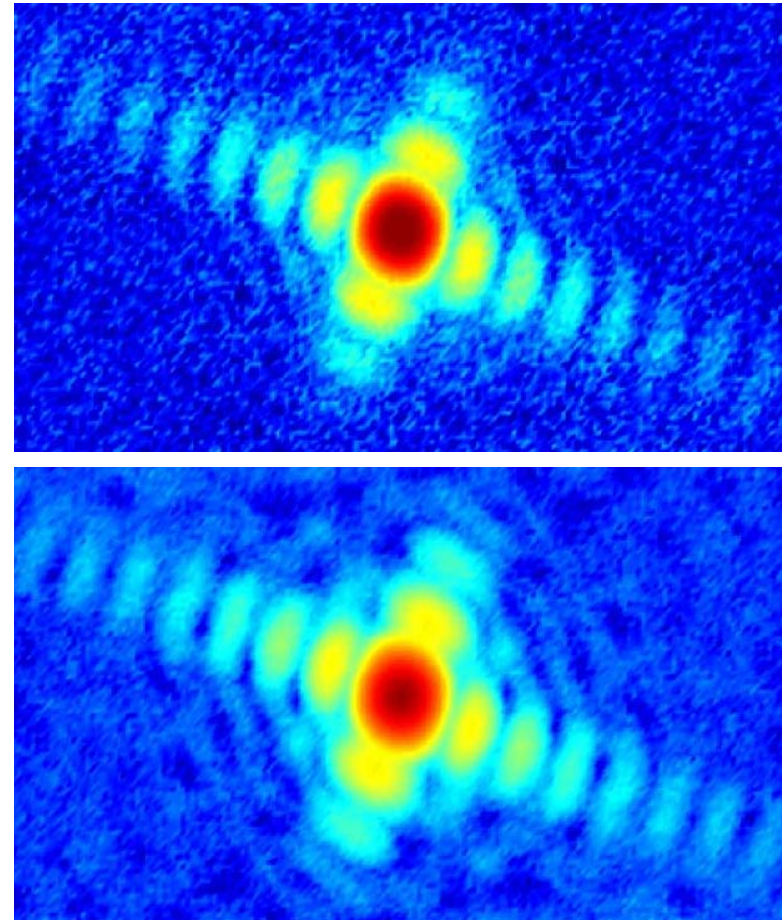


Reconstructed Image of Silver Nanocrystal

I. K. Robinson, University of Illinois, DMR-0308660

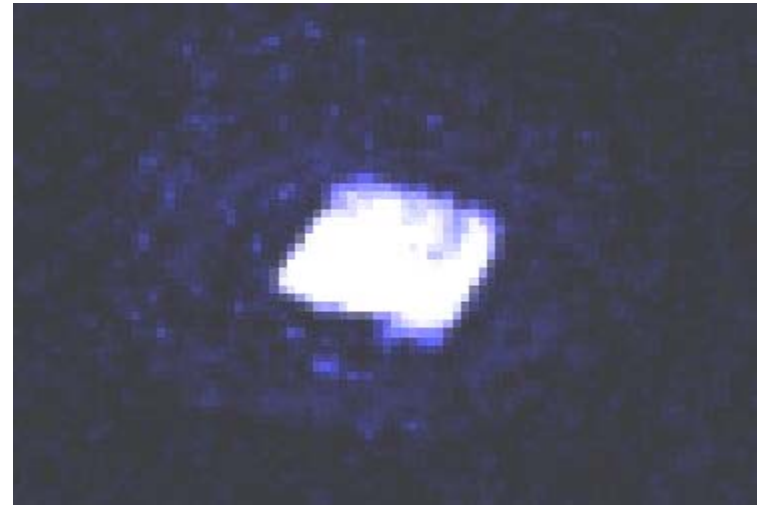
- Top panel is a coherent X-ray diffraction pattern, measured at Sector 34 of the Advanced Photon Source, of a single silver nanocube, obtained by chemical synthesis.
- Bottom panel is the Fourier transform of the shape of the crystal, derived by iterative phasing of the data using Fienup's HIO-algorithm.



Reconstructed Image of Silver Nanocrystal

I. K. Robinson, University of Illinois, DMR03-08660

- The shape of the crystal has been obtained by the method. It appears perfect and does not contain internal structure.
- Education/Outreach:
 - Franz Pfeiffer, postdoc
 - Ivan Vartanyants, co-PI
 - Garth Williams, grad student
 - Lauren Perskie, REU undergrad participated in this work.



200nm

SEM by Sun
and Xia (UW)

